DOCUMENT RESUME

ED 208 951 EC 133 522

AUTHOR Vopata, Alvin F.
TITLE A Low Vision Orientation and Mobility Curriculum to Assist in Preparing Students for Contemporary Living.
PUB DATE Apr 81
NOTE 11p.: Paper presented at the Annual International Convention of The Council for Exceptional Children (59th, New York, NY, April, 1981, Session T-71).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Adjustment (to Environment): Body Image: Elementary Secondary Education: Partial Vision: *Program Content: Transportation: *Travel Training: *Visual Impairments: *Visually Handicapped Mobility
IDENTIFIERS California (Tulare County)

ABSTRACT

An orientation and mobility curriculum developed in Tulare County, California, includes 30 units for legally blind, partially sighted, multi-impaired, and low functioning sighted students in grades K through 12. Each section includes eight steps to teach basic concepts. Assessment guidelines are used to determine strengths and deficiencies. The 30 units in the curriculum include body image, laterality/directionality, sound localization, indoor signs and symbols, orientation aid, precane mobility skills, community orientation, rural travel, public transportation, government office familiarization, shopping center familiarization, physical hazards and barriers, independent problem solving, and use of the sonicguide. Games are used in the instructional process for motivation. (CL)

****
* Reproductions supplied by EDRS are the best that can be made
* from the original document.
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED204951

A LOW VISION ORIENTATION AND MOBILITY CURRICULUM TO ASSIST IN PREPARING STUDENTS FOR CONTEMPORARY LIVING

by

Alvin E. Vopata

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Alvin E. Vopata
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

A Paper Written for Presentation at the International Council of Exceptional Children Convention in New York City, April, 1981.

EC 133522

A LOW VISION ORIENTATION AND MOBILITY CURRICULUM TO ASSIST IN PREPARING STUDENTS FOR CONTEMPORARY LIVING

The purpose of this paper is to share some of the contents and effects of an orientation and mobility curriculum developed in Tulare County, California, for use in its Designated Instruction and Services Program. The curriculum as a whole is intended for students who are legally blind, students who are partially-seeing, students who are multiply-impaired, and students who are sighted, but would benefit from orientation and mobility instruction due to their functioning level.

Thirty units are included in the curriculum guide. A list of these will appear later in this report. Some of the units are intended specifically for one of the four groups of students noted above; others may be appropriate for more than one group of students.

The curriculum was prepared to provide guidelines and assessment tools for instructing and assessing a wide range of orientation and mobility students in an itinerant, public school, K-12 program, but much of it can be readily utilized in various types of residential programs and rehabilitation programs for adults. That is, even though the curriculum was developed with some distinctly structured features, its parameters are flexible in relation to its uses.

In consideration of the fact that there are numerous definitions of "curriculum", it may be helpful to recognize the one that is used most commonly in the curriculum guide and in this paper.

Johnson (1977) defines curriculum as "An organized set of intended learning outcomes". These learning outcomes may include endless possibilities in an orientation and mobility curriculum, due to the inherent complexity of the field, however they are presently limited to 24 per unit in the curriculum guide to obtain closure. In the process of using these 720 possible objectives in the instruction and assessment process with a variety of students, additional learning will likely occur with some students. Even so, the basic process is both organized and intentional.

Instructional objectives for individual students in the Tulare County DIS Program are determined in meetings involving both teachers and parents. Often broad objectives are established which have numerous components with sequential, interrelated elements. The descriptions of the units identify some of these; others become apparent as the instruction process is utilized in relation to specific students.

As recommended by Yeardon (1974), these instructional objectives must be clearly defined tasks indicating what each student is to do, followed by specific criteria for assessing outcomes. What each student is to do in each learning experiences is outlined in the curriculum guide as Plan A or Plan B. The actual instruction process usually involves a combined use of both plans, however, Plan A is designed to develop conceptual knowledge, while Plan B is intended to develop motor performance.

In relation to orientation and mobility, Plan A relates most closely to orientation, and Plan B relates most closely to mobility, but just as Plan A and Plan B may be used in combined form, so is orientation integrated with mobility in various functions of daily living.

Plan A includes these eight steps:

Step 1: Instructor will obtain student's attention.

Step 2: Student will listen as instructor provides verbal explation of concept or information about the environment.

Step 3: Instructor will have student repeat and/or explain what the instructor has told the student.

Step 4: Student will correct or refine the explanation, as needed, with instructor's assistance.

Step 5: Instructor will have the student relate the concept to a specific position and/or object in the surrounding environment.

Step 6: Student will correct or refine his/her association process, with the instructor's assistance.

Step 7: Instructor will have the student explain how the concept, or the environmental information applies to other objects, positions and/or places.

Step 8: Repeat step 6.

These eight steps may appear to be an unnecessarily complicated procedure for teaching basic concepts. In many instances involving alert, attentive, intelligent students, it may be considerably condensed.

Before simplifying the process too abruptly, however, one should consider what Duckworth (1973) has written about the acquisition of concepts: "Since words are convenient labels for concepts, teachers are often misled to believe that a child has learned a concept, although he has only learned a label for it. Concepts can not be transmitted through language alone."

Plan B includes these eight steps:

Step 1: Instructor will explain the mobility assignment, utilizing appropriate aids, if needed.

Step 2: Student will restate instruction and/or the performance objective.

Step 3: Instructor will clarify the objective, if needed.

Step 4: Student will perform actions as indicated in the performance objective.

Step 5: Instructor will discuss the student's performance after the activity has been attempted.

Step 6: Student will relate the performance objective and subsequent learning experience to another envirnment relavent to the student.

Step 7: Instructor will aid the student in correcting misconceptions and in transfering knowledge and skills to related settings.

Step 8: Student will repeat the experience or have related, reinforcing experiences, as needed, for acquiring the intended knowledge and/or skills.

As with Plan A, these steps may be condensed with some students in some circumstances.

According to Kay,(1974), "To be measurable, mobility must be reduced to a set of well-defined skills. The relationship between these skills and what may vaguely be termed mobility has to be established before more objective results can be obtained from real life settings". Kay's words were considered in the development of the guide, including instruction plans A and B, but Wolff's (1974) caution needs to be carefully considered by anyone who thinks exlicite behavioral objectives provide the panacea for all instruction difficulties:

"When the year's curriculum becomes so cluttered with behavioral objectives that there is no time to pursue interesting problems, school becomes a social arrangement by and for adults in which children have no stakes other than to fulfill behavior objectives."

Assessment guidelines are provided in the curriculum to determine student strenghts and deficiencies prior to instruction (pre-test) and to discover gaps and unlearned or unretained knowledge and skills following instruction (post-test).

The guide contains a key to assessment symbols used in the recording of data pretaining to student performance during the assessment process. Four of these symbols indicate levels of verbal expression, and four others indicate levels of physical performance. Assessment forms consistently include information related to student being assessed, the unit involved, specific concepts or activities in that unit, performance levels and the dates particular items were assessed.

Portions of the curriculum guide intended for use with partially-seeing students are integrated through much of its contents, as well as separated in some sections where certain information is clearly related to such students, hence most of what has already appeared in this paper may relate to any of the four groups for which the guide is intended.

The following page of this paper lists the thirty units of the curriculum guide. The names of the units that are followed by asterisks have been considered most appropriate for instructing and assessing partially-seeing students.

Students progress through these units at whatever pace is appropriate to facilitate learning. Instruction is likely to cover several months of low-vision orientation and mobility experiences. Although some of the instructional objectives are in recommended sequence, most may be presented in ways that most appropriately fit individual student needs and environmental circumstances. Some students may need various reinforcing related experiences to acquire certain types of knowledge and skills; other students may not be included in various learning experiences because they have demonstrated that they are functioning at a higher level.

Student responses and actions are checked with a pencil, so they may be changed as the student's performance changes. Units are color-coded to provide specific information on the progress chart in relation to individual student's progress through definite units.

ORIENTATION AND MOBILITY UNITS

Unit 1 -- BODY IMAGE.*

Unit 2 -- LATERALITY/DIRECTIONALITY.*

Unit 3 -- PERCEPTUAL-MOTOR ACTIVITIES.*

Unit 4 -- SOUND LOCALIZATION.

Unit 5 -- BASIC CONCEPTS.*

Unit 6 -- ADVANCED CONCEPTS.*

Unit 7 -- CONCEPT DEVELOPMENT GAMES.*

Unit 8 -- INDOOR SIGNS AND SYMBOLS.*

Unit 9 -- OUTDOOR SIGNS AND SYMBOLS.*

Unit 10 -- ORIENTATION AIDS.

Unit 11 -- CHANG DIAGRAM AND MOBILITY KITS.

Unit 12 -- PRE-CANE MOBILITY SKILLS.

Unit 13 -- COMMUNITY ORIENTATION.*

Unit 14 -- DIAGONAL/TOUCH TECHNIQUES.

Unit 15 -- CAMPUS TRAVEL. *

Unit 16 -- RURAL TRAVEL.*

Unit 17 -- BASIC RESIDENTIAL TRAVEL.*

Unit 18 -- ADVANCED RESIDENTIAL TRAVEL.*

Unit 19 -- BASIC COMMERCIAL AREA TRAVEL.*

Unit 20 -- ADVANCED COMMERCIAL AREA TRAVEL.*

Unit 21 -- PUBLIC TRANSPORTATION.*

Unit 22 -- SIGNIFICANT INDOOR COMMERCIAL FAMILIARIZATION.*

Unit 23 -- GOVERNMENT OFFICE FAMILIARIZATION.*

Unit 24 -- SHOPPING CENTER FAMILIARIZATION.*

Unit 25 -- MAJOR OFFICE BUILDING FAMILIARIZATION.*

Unit 26 -- PHYSICAL HAZARDS AND BARRIERS.*

Unit 27 -- INDEPENDENT PROBLEM SOLVING.*

Unit 28 -- MOBILITY IN DEVELOPMENT CENTERS.

Unit 29 -- USE OF MONOCULARS/LOW VISION. *

Unit 30 -- USE OF THE SONICGUIDE.

*Appropriate for most partially-seeing students.

One of the instructional procedures noted in the guide and used extensively in Tulare County involves the use of games to motivate students and provide learning experiences related to activities of daily living. Rojas (1974) provides the rationale for using games in the instruction process:

"1. Games motivate.

2. Game playing is enjoyable.

3. Game playing is something to look forward to.

4. Unmotivated and low motivated students become involved in game dynamics.

5. Games lead to interest in simulated subject matter.

6. Games are orderly systems that offer students a sense of control.

7. Games help students understand the world by interpreting selected aspects of reality."

Naturally, over-use of games may produce inefficient learning, but as a whole, Rojas' analysis appears valid. Some of the games which partially-seeing students may enjoy and relate to independent living activities include "Around Town", "Championship Moto-Cross", "Space Rescue", "Build-A-Meal", "Emergency Call", "Take the Lead at LeMans", and various "Spingo" games. These were recently developed by orientation and mobility specialists for use with partially-seeing and other special education students.

Discussion:

In view of the fact that the majority of students receiving orientation and mobility services have partial vision, it is

hoped that the portions of the curriculum guide that apply to these students may contribute to their increased knowledge and confident, independent functioning. Copies of the complete curriculum guide will be available for distribution following its publication.

BIBLIOGRAPHY

Duckworth, Eleanor. "Language and Thought," Piaget in the Classroom, eds. M. Schwebel and J. Raph (New York: Basic Books, 1973).

Johnson, Mauritz. "Definitions and Models in Curriculum," Curriculum and Evaluation, eds. Arno Bellack and Herbert Kliebard (Berkeley: McCutchan Publishing, 1977).

Kay, Leslie. Toward Objective Mobility Evaluation: Some Thoughts on a Theory. (New York: American Foundation for the Blind, 1974).

Rojas, Billie. "Futuristics, Games and Educational Change," Learning for Tomorrow: The Role of the Future in Education, ed. Alvin Toffler (New York: Random House, 1974).

Vopata, Alvin. Curriculum Guide for Public School Orientation and Mobility Programs (Unpublished).

Weiner, William and Alvin E. Vopata. "Suggested Curriculum for Distance Vision Training with Optical Aids." Journal of Visual Impairment and Blindness, 74:49-56, 1980.

Wolff, Peter. "What Piaget Did Not Intend," Fourth Annual Piagetian Conference Proceedings, ed. G. Lubin (Los Angeles: University of Southern California Press, 1974).

Yeardon, Anne. Toward Independence: The Use of Instructional Objectives in Teaching Daily Living Skills to the Blind. (New York: American Foundation for the Blind, 1974).